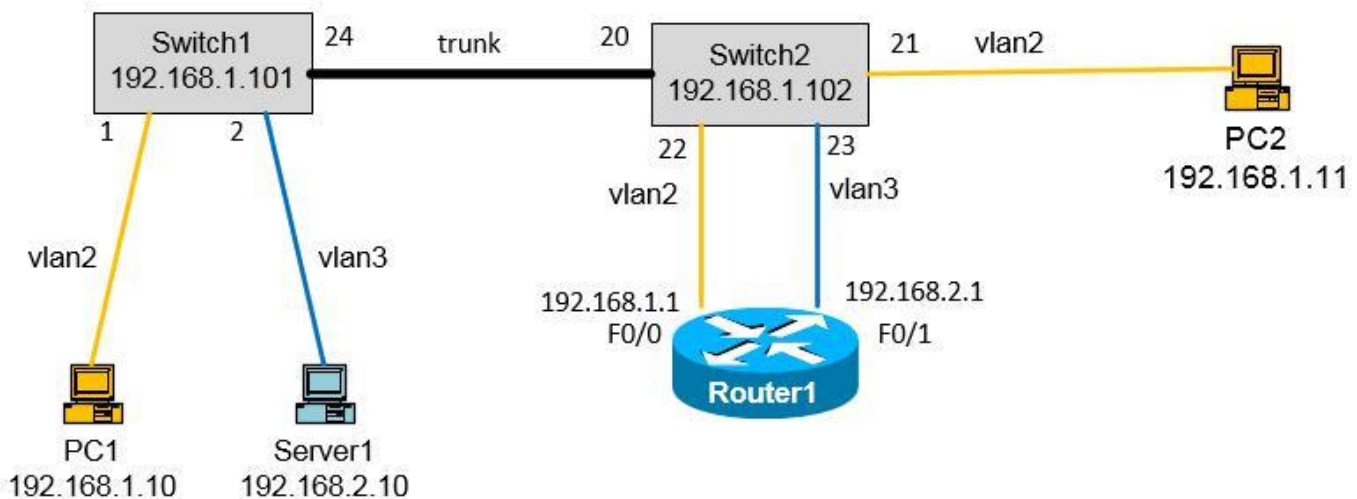# CS4471 Lab Assignment 5
VLAN & Inter-Vlan Routing (version 1.0)

Use Cisco Packet Tracer program to create the network shown below.
- configure the hostnames, IP address, and subnet mask(255.255.255.0) of all six devices as shown.
- interconnect the six devices with appropriate Ethernet cables and verify that all six links are up

1. (20 pts) Submit screenshot of Cisco Packet Tracer network diagram created. Make sure that the port labels are shown (Options->Preferences->Show Port Labels)

2. (20 pts) On the two Ethernet switches, configure configure the switch ports to be access ports or trunk port. Access ports needs to be configured to be in vlan2 or vlan3 as shown in diagram.

a. Submit output of commands "show vlan" and "show interface trunk" from the CLI of Switch1.

b. Submit output of commands "show vlan" and "show interface trunk" from the CLI of Switch2

3a. (10 pt) From command prompt window of PC1, verify that you can ping IP address of PC2.
Submit screenshot of this output.

3b. (10 pt) Configure the two ports on Router1 to have IP addresses shown in diagram. From CLI of Router1, verify that you can ping IP address of PC1 and PC2. Submit screenshot showing that from command prompt window of PC1, you can ping IP address 192.168.2.1.

4. (10 pt) Submit screenshot showing that from command prompt window of PC1, you can ping and tracert to IP address of Server1.

5. (30 pts) submit printout of output of "show running-config" from CLI of each switch and router.